CLAIMS:

- 1. A high flow miscible thermoplastic resin composition comprising: structural units derived from substituted or unsubstituted polycarbonate and substituted or unsubstituted aliphatic polyester.
- 2. The composition of claim 1, wherein said polycarbonate comprises repeating units of the formula:

$$-$$
O $-$ R₁ $-$ O $-$ C $-$

wherein R_1 is a divalent aliphatic or aromatic radical derived from a dihydroxy compound of the formula HO-D-OH, wherein D has the structure of formula:

wherein A¹ represents an aromatic group or an aliphatic group; E comprises a sulfur-containing linkage, sulfide, sulfoxide, sulfone; a phosphorus-containing linkage, phosphinyl, phosphonyl; an ether linkage; a carbonyl group; a tertiary nitrogen group; a silicon-containing linkage; silane; siloxy; a cycloaliphatic group; cyclopentylidene, cyclohexylidene, 3,3,5-trimethylcyclohexylidene, methylcyclohexylidene, 2-[2.2.1]-bicycloheptylidene, neopentylidene, cyclopentadecylidene, cyclododecylidene, adamantylidene; an alkylene or alkylidene group, which group may optionally be part of one or more fused rings attached to one or more aromatic groups bearing one hydroxy substituent; an unsaturated alkylidene group; or two or more alkylene or alkylidene groups connected by a moiety different from alkylene or alkylidene and selected from the group consisting of an aromatic linkage, a tertiary nitrogen linkage; an ether linkage; a carbonyl linkage; a silicon-containing linkage, silane,

siloxy; a sulfur-containing linkage, sulfide, sulfoxide, sulfone; a phosphoruscontaining linkage, phosphinyl, and phosphonyl;

R¹ independently at each occurrence comprises a mono-valent hydrocarbon group, alkenyl, allyl, alkyl, aryl, aralkyl, alkaryl, or cycloalkyl;

Y¹ independently at each occurrence is selected from the group consisting of an inorganic atom, a halogen; an inorganic group, a nitro group; an organic group, a monovalent hydrocarbon group, alkenyl, allyl, alkyl, aryl, aralkyl, alkaryl, cycloalkyl, and an alkoxy group;

the letter "m" represents any integer from and including zero through the number of replaceable hydrogens on A¹ available for substitution;

the letter "p" represents an integer from and including zero through the number of replaceable hydrogens on E available for substitution;

the letter "t" represents an integer equal to at least one; the letter "s" represents an integer equal to either zero or one; and "u" represents any integer including zero.

- 3. The composition of claim 2, wherein the dihydroxyaromatic compound from which D is derived is bisphenol A.
- 4. The composition of claim 2, wherein the dihydroxyaromatic compound from which D is derived is a modified bisphenol A.
- 5. The composition of claim 4, wherein the bisphenol A is modified with diol wherein said diol is at least one selected from the group consisting of a .alkylydiene diols, alkane diols, straight chain, branched, or cycloaliphatic alkane diols containing at least about 2 to 20 carbon atoms.
- 6. The composition of claim 5, wherein the diol is selected from a group consisting of ethylene glycol; propylene glycol, pentane diol; dipropylene glycol; 2-methyl-1,5-

pentane diol; 1,6-hexane diol; dimethanol decalin, dimethanol bicyclo octane; 1,4-cyclohexane dimethanol and particularly its cis- and trans-isomers; triethylene glycol; 1,10- decane diol; and mixtures thereof.

- 7. The composition of claim 1, wherein the polycarbonate comprises a mixture of aromatic and aliphatic polycarbonates.
- 8. The composition of claim 7, wherein said polycarbonate comprises a mixture of bisphenol A polycarbonate and tricyclodecane methanol polycarbonate.
- 9. The composition of claim 1, wherein the polyester is at least one selected from a group consisting of poly(ethylene terephthalate), poly(butylene terephthalate), poly(propylene terephthalate), poly(cyclohexanedimethanol terephthalate), poly(cyclohexanedimethanol-terephthalic acid-ethylene glycol), poly(butylene-2,6-naphthalate), poly(ethylene-2,6-naphthalate), poly(butylene dicarboxylate) and combinations thereof.
- 10. The composition of claim 1, wherein the polyester may optionally be a low molecular weight polyester.
- 11. The composition of claim 10, wherein the molecular weight of the polyester is in a range of at least between about 8,000 to about 20,000.
- 12. The composition of claim 1, wherein said thermoplastic resin composition comprises structural units derived from polyester and polycarbonate in a range of about 10 to 90 percent by weight of polyester and 90 to 10 percent by weight of polycarbonate.
- 13. The composition of claim 1, wherein said thermoplastic resin composition comprises structural units derived from polyester and polycarbonate in a range of about 30 to 70 percent by weight of polyester and 70 to 30 percent by weight of polycarbonate.
- 14. The composition of claim 1, wherein said thermoplastic resin composition has a yellowness index of less than about 10.

- 15. The composition of claim 1, wherein said thermoplastic resin composition has a glass transition temperature of between about 85 °C and about 125 °C.
- 16. An article comprising the composition of claim 1.
- 17. A high flow miscible thermoplastic resin composition comprising: structural units derived from substituted or unsubstituted polycarbonate and substituted or unsubstituted low molecular weight aliphatic polyester.
- 18. The composition of claim 17, wherein said polycarbonate is a bisphenol A polycarbonate.
- 19. The composition of claim 17, wherein said polyester is at least one selected from a group consisting of poly(ethylene terephthalate), poly(butylene terephthalate), poly(propylene terephthalate), poly(cyclohexanedimethanol terephthalate), poly(cyclohexanedimethanol-terephthalic acid-ethylene glycol), poly(butylene-2,6-naphthalate), poly(ethylene-2,6-naphthalate), poly(butylene dicarboxylate) and combinations thereof.
- 20. The composition of claim 17, wherein said polyester has a minimum weight average molecular weight in a range of between about 8,000 and about 20,000.
- 21. The composition of claim 17, wherein said thermoplastic resin composition comprises structural units derived from polyester and polycarbonate in a range of about 10 to about 90 percent by weight of polyester and about 90 to about 10 percent by weight of polycarbonate.
- 22. The composition of claim 17, wherein said thermoplastic resin composition has a yellowness index of less than about 10.
- 23. The composition of claim 17, wherein said thermoplastic resin composition has a glass transition temperature of between about 85 °C and about 125 °C.
- 24. An article comprising the composition of claim 17.

- 25. A process to prepare a high flow miscible thermoplastic resin composition comprising: structural units derived from substituted or unsubstituted polycarbonate and substituted or unsubstituted aliphatic polyester wherein said process comprises the steps of mixing the polycarbonate, polyester to form a first mixture.
- 26. The process according to claim 25, including the steps of
 - a. melting said polycarbonate and polyester to form a molten mixture;
 - b. extruding said molten mixture in an extruder to form an extrudate; and
 - c. molding said extrudate.

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- 27. The process according to claim 25, further comprising the step of pelletizing the extrudate.
- 28. The process according to claim 25, wherein said melting is carried out at in temperature range between about 200 °C and about 300 °C.
- 29. The process according to claim 25, wherein said extruding is carried out at a temperature range between about 220 °C and about 250 °C.
- 30. The process according to claim 25, wherein said melting may optionally be carried out in presence of a catalyst.
- 31. The process according to claim 25, wherein said catalyst is at least one selected from the group consisting of alkali metal and alkaline earth metal salts of aromatic dicarboxylic acids, alkali metal and alkaline earth metal salts of aliphatic dicarboxylic acids, Lewis acids, metal oxides, their coordination complexes and mixtures thereof.
- 32. The process according to claim 25, wherein said mixing is optionally carried out in presence of a solvent.
- 33. The process according to claim 32, wherein said solvent is at least one selected from the group consisting of chloroform, acetone, methylene chloride, carbon tetrachloride, tetrahydrofuran, and mixtures thereof.